

REMARKS

Amendments

Claim 1 is amended to recite that in polymeric layer (2) the polymer “comprises” a graft copolymer having polyamide blocks. In addition, claim 1 is amended to recite that the average number of moles of unsaturated monomer X attached to the polyolefin backbone is 1.3 to 7 moles per mole of chain. See, e.g., page 17, lines 9-12.

New claim 29 recites that in polymeric layer (2) the polymer “consists of” the graft copolymer having polyamide blocks, as was recited in the prior version of claim 1. New claims 30 and 33 recite that the polyamide having an amine end group has a molar mass of between 1,000 and 5,000 g/mol. See, e.g., page 18, lines 14-15. New claims 31-33 recite that the graft copolymer having polyamide blocks has a nanostructured organization with polyamide lamellae having a thickness of between 10 and 50 nanometers. See, e.g., page 19, lines 12-14.

New claims 34 and 36 are similar to claim 1 except that they recite, respectively, that polyamide having an amine end group has a molar mass of between 1,000 and 5,000 g/mol, and that the graft copolymer having polyamide blocks has a nanostructured organization with polyamide lamellae having a thickness of between 10 and 50 nanometers. New claims 35 and 37 are the same as claim 29, except that they depend from claims 34 and 36 respectively.

Disclosure of Schmitz et al.

Schmitz et al. (US 6,794,048) disclose a multilayer composite that comprises a polyamide layer and a polyolefin layer. These layers are joined by a bonding layer which does not consist of a functionalized polyolefin. The composite comprises (see column 1, line 40 - column 2, line 2):

- (I) a layer I of a polyamide molding composition;
- (II) (II) a layer II of a bonding agent comprising at least 50% by weight, of a **mixture** of a) from 30 to 70 parts by volume of polyamide, and b) from 70 to 30 parts by volume of polyolefin, the sum of the parts by volume being 100, **wherein at least some of the polyamide is present in the form of a polyamide-polyolefin graft copolymer** or as a highly branched polyamine-polyamide copolymer; and optionally

(III) (III) a layer of a polyolefin molding composition.

At is clearly apparent that the layer (II) of the composite, i.e., the bonding agent layer, comprises at least 50 wt. % of a mixture of polyamide and polyolefin. Reference to this mixture can be found throughout the disclosure. See, e.g., column 3, lines 6-12. This mixture may contain a constituent which is in the form of polyamide-polyolefin graft copolymer, as described at, for example, column 1, lines 63-67 and column 3, lines 7-47. Further, Schmitz et al. specifically discloses at column 1, lines 40-43 that the bonding layer does not consist of a functionalized polyolefin. Thus, layer II of the multilayer structure composite of Schmitz et al. contains a mixture of polyamide and polyolefin polymers, wherein the mixture may further contain polyamide-polyolefin graft copolymer.

Furthermore, Schmitz et al. does not disclose or suggest a graft copolymer comprising a polyolefin backbone and at least one polyamide graft wherein the grafts are attached to the polyolefin backbone by the residues of an unsaturated monomer (X), having a functional group capable of reacting with a polyamide having an amine end group, and the average number of moles of unsaturated monomer X attached to the polyolefin backbone is 1.3 to 7 moles per mole of chain.

Additionally, Schmitz et al. do not disclose a polyamide having an amine end group and a molar mass of between 1,000 and 5,000 g/mol to be reacted with the residues of an unsaturated monomer (X) attached to the polyolefin backbone. Schmitz et al. also fails to disclose or suggest that a graft copolymer having polyamide blocks and having a nanostructured organization with polyamide lamellae having a thickness of between 10 and 50 nanometers.

In view of the above remarks, it is respectfully submitted that the disclosure of Schmitz et al. fails to anticipate and/or render obvious applicants claimed invention.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

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Attorney Docket No.: ATOCM-0349

Date: March 20, 2009

ATOCM-0349